

**Testimony of Reuben Jeffery III**  
**Chairman**  
**U. S. Commodity Futures Trading Commission**  
**before the**  
**Subcommittee on Energy and Air Quality**  
**Committee on Energy and Commerce**  
**United States House of Representatives**  
**November 2, 2005**

Chairman Barton, Ranking Member Dingell, Chairman Hall, Ranking Member Boucher and Members of the Subcommittee:

I appreciate the opportunity to testify on behalf of the Commodity Futures Trading Commission (CFTC) concerning the CFTC's oversight of energy futures and options markets. I am pleased to testify alongside Chairman Joseph Kelliher of the Federal Energy Regulatory Commission and Assistant Secretary Mark Maddox of the Department of Energy. Each of our agencies has a distinct and important function in the markets for energy products and we, at the CFTC, are committed to continuing inter-agency cooperation and coordination in order to ensure an effective and efficient regulatory oversight regime.

The CFTC has been paying particularly close attention to futures trading in energy commodities, both before and since the recent hurricanes, because of the importance of energy prices and supplies to the U.S. economy and to every U.S. citizen. Both the level and the volatility of prices will react to new information. If such reactions are based on accurately reported information about market fundamentals, such as short- or long-term changes in supply or demand, then the markets are performing their proper price discovery function. Based on our surveillance so far, we believe that heating oil and natural gas futures markets have been accurately reflecting the underlying fundamentals of these markets.

In my testimony today, I will describe the CFTC's oversight of the energy futures markets. I will also share my observations on the current state of the futures markets for natural gas and heating oil.

**A. The Commodity Futures Trading Commission's Core Mission**

Futures markets play a critically important role in the U.S. economy. They provide risk management tools that producers, distributors, and commercial users of commodities (such as natural gas and heating oil) utilize to protect themselves from unpredictable price changes. The futures markets also play a price discovery role as participants in related cash and over-the-counter (OTC) markets look to futures markets to discover prices, which accurately reflect information on supply, demand, and other factors. Both functions would be harmed by manipulation of prices.

The CFTC's primary mission under the Commodity Exchange Act (the CEA) is to ensure that the commodity futures and options markets operate in an open and competitive manner, free of price distortions. The CFTC fulfills this obligation through a comprehensive, multi-faceted program that is designed to identify and mitigate the potential for manipulation and other market abuses, and to ferret out and punish illegal behavior.

**B. The CFTC's Market Oversight Program**

To the extent possible, the CFTC attempts to proactively identify and mitigate the potential for price manipulation. When any new futures or options contract is listed for trading on a futures exchange, the CFTC staff reviews the terms and conditions of the contract to determine if it is readily susceptible to manipulation. For example, although most futures contracts are ultimately cash-settled (meaning participants offset their positions through the exchange by paying or receiving money rather than by making or taking delivery of the actual

commodity), the CFTC carefully examines those contracts that permit physical delivery (as do key energy contracts on the New York Mercantile Exchange, or NYMEX) to ensure that the deliverable supply of the commodity is sufficient to facilitate orderly deliveries and liquidations at contract expiration dates, and to prevent any would-be manipulator from cornering or squeezing the market.

Every trading day, CFTC staff closely monitors trading activities on the exchanges to detect unusual activity or price aberrations that may indicate actual or attempted manipulation. The cornerstone of the CFTC's market surveillance program is the Large Trader Reporting System. The Large Trader Reporting System requires clearing members, futures commission merchants, and foreign brokers to file daily reports with the CFTC concerning their own and customer positions in a particular contract. This reporting requirement is triggered when a trader holds a position at or above specific reporting levels set by CFTC's regulations. Through Large Trader Reports, the CFTC becomes aware of concentrated and coordinated positions that might be used by one or more traders to attempt manipulation.

In addition to the daily Large Trader Reporters, the CFTC may issue a "special call" to a reportable trader or firm. Through these special calls, the CFTC can obtain additional, more detailed information on a participant's trading and delivery activity, and on the trader's positions and transactions in the underlying commodity.

Market surveillance is not conducted exclusively by the CFTC. Each futures exchange is required under the CEA to affirmatively and effectively supervise trading, prices, and positions. The CFTC examines the exchanges to ensure that they have devoted appropriate resources and attention to fulfilling this important responsibility. The CFTC staff's findings from these rule enforcement reviews are reported to the CFTC, and are publicly posted on the CFTC web site

([www.cftc.gov](http://www.cftc.gov)). Furthermore, exchanges must impose position limits, where appropriate, to guard against manipulation. For example, NYMEX imposes spot month speculative limits on its energy futures contracts.

When the CFTC's surveillance staff identifies a potential problem situation, the CFTC engages in an escalating series of regulatory steps to work to correct the problem. Typically, the CFTC's staff consults and coordinates its activities with exchange staff. CFTC staff contacts the largest long- and short-side traders to obtain information on, among other things, their delivery intentions and capability, and their price objectives in liquidating trades. The traders are advised of the CFTC's concern regarding the orderly expiration of the futures contract, and reminded that they are expected to trade in a responsible manner. This "jawboning" activity by CFTC staff and the exchanges is usually quite effective in resolving most potential problems. However, when staff is not satisfied that it has been successful, a more formal warning will be issued to the trader in writing of the CFTC's concern about the possibility of manipulation.

Given the CFTC's statutory role as an oversight regulator, and the exchanges' statutory responsibility to monitor trading to prevent manipulation, the CFTC expects that the exchanges will take the lead in resolving problems in their markets, either informally or through emergency action. If an exchange fails to take actions that the CFTC deems necessary, the CFTC has broad emergency powers to direct the exchange to take such action as in the CFTC's judgment is necessary to maintain or restore orderly trading in, or liquidation of, any futures contract. Such actions could include limiting trading to liquidating transactions, imposing or reducing limits on positions, requiring the liquidation of positions, extending a delivery period, or closing a market. Fortunately, most issues are resolved without the need for the CFTC's emergency powers. The

fact that the CFTC has had to take emergency action only four times in its history demonstrates its commitment not to intervene in markets unless all other efforts have been unsuccessful.

### **C. The CFTC's Enforcement Program**

The CFTC aggressively pursues any individual or entity that intentionally seeks to disrupt or undermine the integrity of markets for trading commodity futures and options contracts. The CFTC's Division of Enforcement investigates and, as appropriate, prosecutes individuals and entities for violations of the CEA or CFTC regulations, including manipulation, false reporting, and trade practice abuses (e.g., wash sales and accommodation trading) involving trading on markets subject to CFTC oversight. The proposed sanctions sought in the CFTC's enforcement actions serve the dual purposes of obtaining redress for the charged violations and acting as a deterrent for would-be violators by sending a clear message that improper conduct will not be tolerated.

The CFTC's Division of Enforcement may receive referrals from several sources: the CFTC's own market surveillance staff; the Division's interaction with compliance staff at the relevant exchange; market participants and complaints from members of the public; and other State, Federal, and international regulatory authorities. Upon determining that further inquiry concerning the referral is warranted, Enforcement staff immediately gathers information internally available within the CFTC and from the exchanges, and conducts relevant interviews. The CFTC may grant formal administrative subpoena authority, which enables its Division of enforcement to obtain documents (for example, audio recordings, e-mail and trade data), and testimony from third parties.

The investigation may be conducted in cooperation with the applicable exchange and other regulators such as the Federal Energy Regulatory Commission (FERC). On October 12,

2005, the CFTC and FERC executed a Memorandum of Understanding, pursuant to provisions of the Energy Policy Act of 2005, to ensure that information requests to markets within the respective jurisdiction of each agency are properly coordinated to minimize duplicative information requests, and to address the confidential treatment of proprietary energy trading data. It will enable both the CFTC and FERC to work actively to assure the price integrity of the energy markets.

If warranted at the conclusion of its investigation, the Division of Enforcement will recommend that the CFTC initiate a civil injunctive action in Federal district court or an administrative proceeding. The CFTC may obtain temporary statutory restraining orders and preliminary and permanent injunctions in Federal court to halt ongoing violations, as well as civil monetary penalties, appointment of a receiver, the freezing of assets, restitution to customers, and disgorgement of unlawfully acquired benefits. Administrative sanctions may include orders suspending, denying, revoking, or restricting registration; prohibiting trading; and imposing civil monetary penalties, cease and desist orders, and orders of restitution.

The CFTC also may refer an enforcement matter to the Department of Justice. Criminal activity involving commodity-related instruments can result in prosecution for criminal violations of the CEA and for violations of federal criminal statutes, such as mail fraud or wire fraud.

Not all investigations necessarily lead to the filing of a CFTC enforcement action. For example, in July 2003, the CFTC and FERC issued a joint statement of the results of investigations into a price spike in natural gas that occurred in late February 2003. The CFTC's investigation focused on exchange-traded futures and options trading in natural gas, including obtaining and listening to numerous audiotapes of conversations between clerks on the NYMEX

floor and the customers who were using the markets. The CFTC found nothing in its analysis to suggest any manipulative activity in the natural gas futures and options market at that time.

Similarly, in August 2004, the CFTC issued a statement that it had completed its investigation of the sharp upward movement in prices in the natural gas market that occurred in late 2003. The investigation, which was conducted in full cooperation with FERC and enhanced by the cooperative effort of NYMEX, did not uncover evidence that any entity or individual engaged in activity that violated the CEA with respect to natural gas trading in late 2003. The CFTC's investigation included the extensive review of documents and audio recordings produced by numerous companies and individuals in the natural gas markets, including physical and financial traders, industry analysts, and operators of natural gas storage facilities, as well as testimony and interviews of dozens of individuals.

In recent years, the CFTC's Enforcement program has conducted an extensive investigation of alleged abuses in energy-related markets. This investigation has focused on energy trading firms that allegedly have engaged in: 1) reporting false, misleading or knowingly inaccurate market information to natural gas reporting firms (including price and volume information) which affects or tends to affect the market price of natural gas, including futures prices as traded on NYMEX; and 2) manipulation or attempted manipulation which could affect prices of NYMEX natural gas futures contracts. The CFTC's enforcement actions in the energy sector reflect an approach to market oversight that emphasizes tough enforcement actions against proven wrongdoers. As a result of its efforts in investigating wrongdoing in the energy markets, the CFTC has filed 32 enforcement actions charging 27 companies and 22 individuals. These enforcement actions, which are identified more fully in the Appendix, have thus far resulted in civil monetary penalties totaling nearly \$300 million, among other sanctions.

#### **D. Current State of Futures Markets for Heating Oil & Natural Gas**

Having described the process the CFTC uses to ensure that futures markets are operating in an open and competitive manner, I will now describe what CFTC staff has recently observed in the futures markets for heating oil and natural gas. These observations are directed at the following: 1) participation rates of non-commercial traders, the so-called “speculators”; 2) current futures market prices for contracts with delivery dates during the upcoming winter heating season; 3) recent delivery experience; and 4) the relationship between crude oil futures prices and heating oil futures prices.

##### *1. Participation Rates of Non-Commercial Traders*

Data from the CFTC’s Large Trader Reporting System help answer questions about the role of non-commercial traders in futures markets for heating oil and natural gas. A weekly summary, called the Commitments of Traders (COT) Report, is based on information gathered through the Large Trader Reporting System. The CFTC publicly releases the COT Report every Friday afternoon via its web site ([www.cftc.gov](http://www.cftc.gov)).

A snapshot of positions in the futures markets for heating oil and natural gas, current as of October 25, 2005, shows that as a group, non-commercial traders – that is, those who are commonly labeled as speculators - have most recently held net short positions in both heating oil and natural gas futures markets. In other words, non-commercial traders have held positions that will gain in value if prices for heating oil or natural gas futures fall. In the heating oil futures market, non-commercial traders hold approximately 10 percent of the open long positions and 14 percent of the open short positions. These numbers reflect a net short position since the total number of long positions must equal the total number of short positions in the overall market. In the natural gas futures market, non-commercial traders hold approximately 12 percent of the



open long positions and 15 percent of the open short positions. In other words, as of October 25, 2005, non-commercial traders would benefit from falling – not rising – heating oil and natural gas futures prices.

Positions in both heating oil and natural gas futures are held predominately by commercial traders - that is, producers, refiners, and retailers, who are commonly known as hedgers. In the heating oil futures market, nearly 59 percent of outright long positions (*i.e.*, positions that will gain value if prices rise) are held by commercial traders compared to 10 percent for non-commercial traders. In the natural gas futures market, approximately 44 percent of outright long positions are held by commercial traders compared to 12 percent for non-commercial traders.<sup>1</sup>

Managed money traders, including those called hedge funds, fall into the category of non-commercial traders because they do not have a commercial interest in the product upon which the futures contract is written. As a group, managed money traders represent a significant portion of the relatively small percentage of non-commercial positions in both heating oil and natural gas futures markets. On average, managed money traders make up approximately 61 percent of the non-commercial long positions and 92 percent of the non-commercial short positions in the natural gas futures markets. In the heating oil futures market, managed money

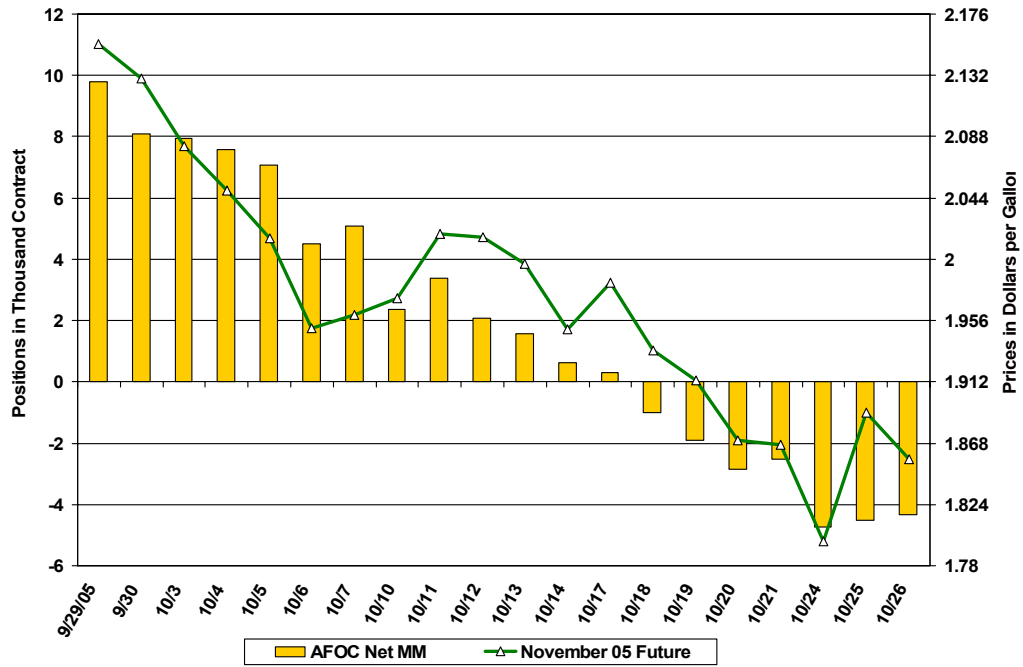
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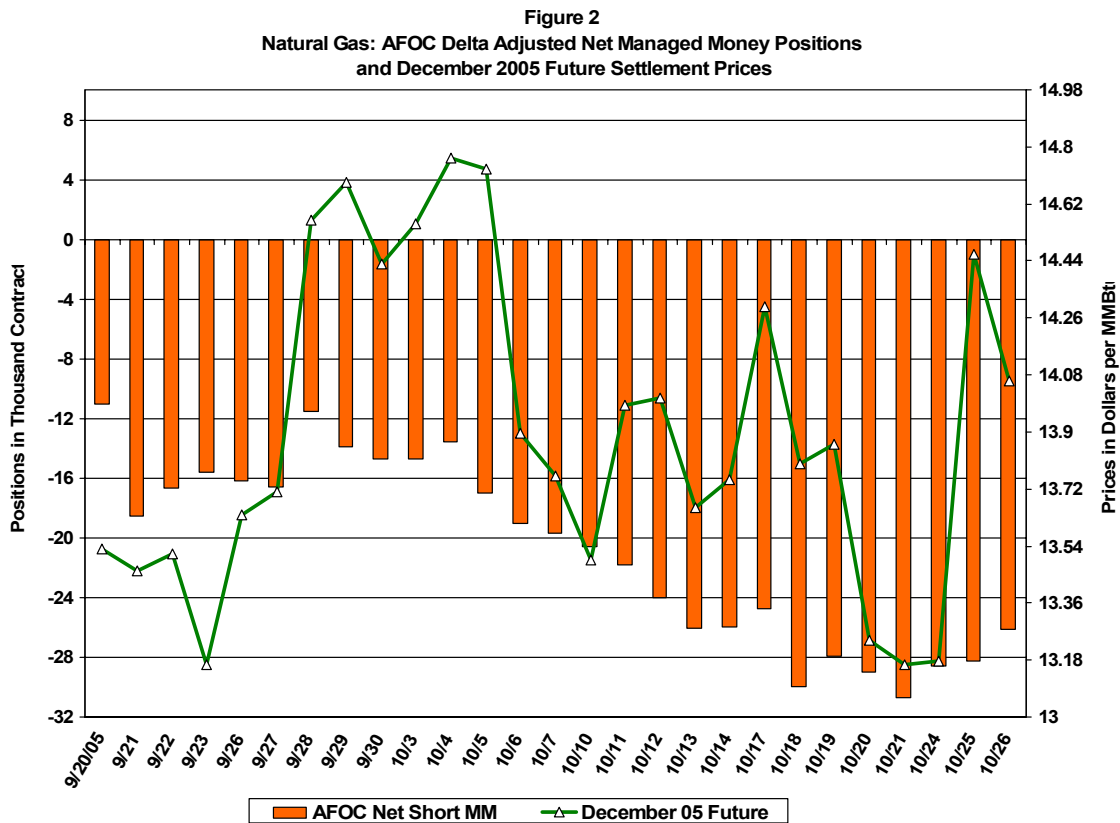
<sup>1</sup> A large percentage of the remaining long positions are held by traders whose positions are too small to meet the reporting size threshold for inclusion in the Commission's Large Trader Report. The remaining long positions are held as part of so-called "spread" positions across contract months. A spread position is established by simultaneously taking a long position in one futures contract and taking a short position in a related contract. Although spread positions are generally regarded as speculative, the speculation is based on relative price differences between contracts. Spread strategies do not depend on, and are therefore unrelated to, the overall level or direction of the market.

traders make up 85 percent of the non-commercial long positions and 69 percent of the non-commercial short positions.

Figures 1 and 2 below provide a snapshot of participation by managed money traders in the November 2005 heating oil futures contract and the December 2005 natural gas futures contract traded at NYMEX. The net positions of managed money traders as a group are displayed by the vertical columns. These positions are reported, in thousands of contracts, for all futures and options combined (defined as “AFOC” in Figures 1 and 2 below). Each heating oil contract is written on 1,000 barrels (equivalent to 42,000 gallons) of heating oil. Each natural gas contract is written on 10,000 million British Thermal Units (mmBTU) of natural gas. The continuous line on each chart shows the end-of-day price for the nearby futures contract. Both charts show that managed money traders have most recently held net short positions in both markets, and they would benefit from falling – not rising – futures prices. The charts also show that while the positions of managed money traders and prices generally move together, there are several instances where prices move independently from the positions of managed money traders. A conclusion that can be drawn from this chart is that managed money traders, and speculators in general, do not have perfect foresight.

Figure 1  
 Heating Oil: AFOC Delta Adjusted Net Managed Money Positions  
 and November 2005 Future Settlement Prices





The role of non-commercial traders in futures markets has been studied extensively, both by the CFTC’s economists and others. One lesson from these studies is that non-commercial traders are necessary in order for futures markets to facilitate the needs of hedgers. In order for hedgers to reduce the risk that they face in their day-to-day commercial activities, they need to trade with someone willing to accept the risk the hedger is trying to shed. Therefore, both hedgers and speculators are necessary for the futures markets to perform their vital role of transferring risk to those who are willing to accept it for a price.

A recent study by the CFTC’s economists demonstrates the relationship between speculators and hedgers. The study shows that when a commercial trader sells, it will often be a

managed money trader who takes the other side of the transaction; when a commercial trader buys, it will often be a managed money trader who is the seller. This observation is consistent with the notion that managed money traders respond to price changes; they are not the cause of price changes.

## *2. A Snapshot of Current Futures Market Prices*

As I mentioned earlier, the futures markets serve an important price discovery function. As a general policy, the CFTC refrains from predicting prices. However, futures market prices can be viewed as reflecting the markets' aggregate expectation of future spot market prices. Each table below displays current (as of 10/31/2005) futures prices for contracts expiring during the upcoming winter heating season. These futures prices show, based on current information, that the futures markets expect spot market prices to remain close to current levels. These prices and expectations are revised continuously by the market as new information becomes available.

| <b>Heating Oil Futures Prices</b> |  |
|-----------------------------------|--|
| <b>Delivery Date</b>              | <b>Futures Price as of 10/31/2005</b><br>U.S. dollars and cents per gallon |
| December 2005                     | 1.824  |
| January 2006                      | 1.870  |
| February 2006                     | 1.889  |
| March 2006                        | 1.871  |

| <b>Natural Gas Futures Prices</b> |   |
|-----------------------------------|---|
| <b>Delivery Date</b>              | <b>Futures Price as of 10/31/2005</b><br>U.S. dollars and cents per<br>million British thermal units (mmBtu). |
| December 2005                     | \$12.14   |
| January 2006                      | \$12.55   |
| February 2006                     | \$12.56   |
| March 2006                        | \$12.28   |

Here I should briefly mention what are, in our opinion, the primary causes of the recent high prices and price volatility for heating oil and natural gas. In recent years, demand for petroleum products and natural gas has risen faster than have supplies of these commodities. This has created very tight demand/supply balances in these markets. In economists' jargon, both supply and demand for heating oil and natural gas are price inelastic in the short run. Therefore, changes in supply or demand can, in the short run, have disproportionately large effects on price. In addition, futures markets are by their nature anticipatory; they incorporate into prices a probabilistic estimate of possible future changes in supply and demand. For example, early summer weather forecasts of an unusually active hurricane season this year, and memories of the damage caused last year by Hurricane Ivan, had already caused the natural gas futures market to price-in some possible damage from summer hurricanes well before Hurricane Katrina hit the Gulf Coast. Of course, when Katrina did hit, it did substantially more damage to the energy infrastructure than the futures market had anticipated, and prices increased further. The impact of these storms has significantly changed the fundamentals of these markets.

Hurricanes Katrina and Rita have caused cumulative losses of Gulf production of 74.7 million barrels of crude oil (equivalent to about 5 days of crude inputs into U.S. refineries) and 381 billion cubic feet of natural gas (equivalent to about 7 days of U.S. consumption). Shut-ins of Gulf production of crude oil and natural gas remain at relatively high levels. In addition, outages of crude oil refineries and natural gas processing facilities continue to impact the markets. Nevertheless, heating oil and natural gas prices have recently fallen from their post-Katrina highs in response to declining crude oil prices and apparent declines in demand in response to high prices and generally mild weather.

The direction of heating oil and natural gas prices this winter will be substantially determined by how quickly the energy infrastructure comes back on-line and by winter weather. Current heating oil and natural gas prices, while down a bit from their highs, are by historical standards at high levels.

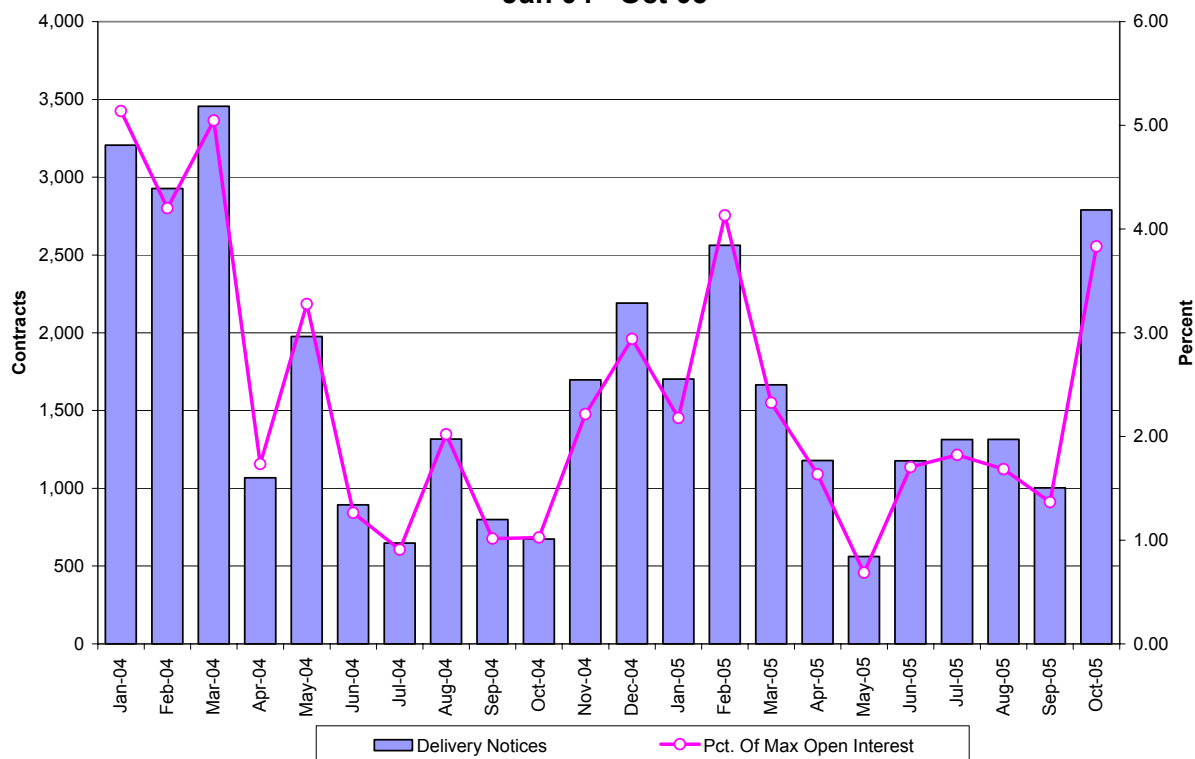
### *3. Recent Delivery Experience*

Figures 3 and 4 below show deliveries for heating oil and natural gas futures contracts since the beginning of 2004. The vertical columns depict the number of contracts delivered. The number of contracts corresponds with numbers displayed on the left-hand axis of the figures. The continuous line, corresponding to the right-hand axis, shows the size of the deliveries as a percentage of the maximum number of open positions established for each contract month. For example, if the maximum number of open positions over a contract's life was 100,000 contracts, and 4,000 positions were settled by delivery, the continuous line would represent 4 percent. The remaining open positions are settled by offset, that is, by taking an equal and opposite futures position that brings the trader's net position to zero.

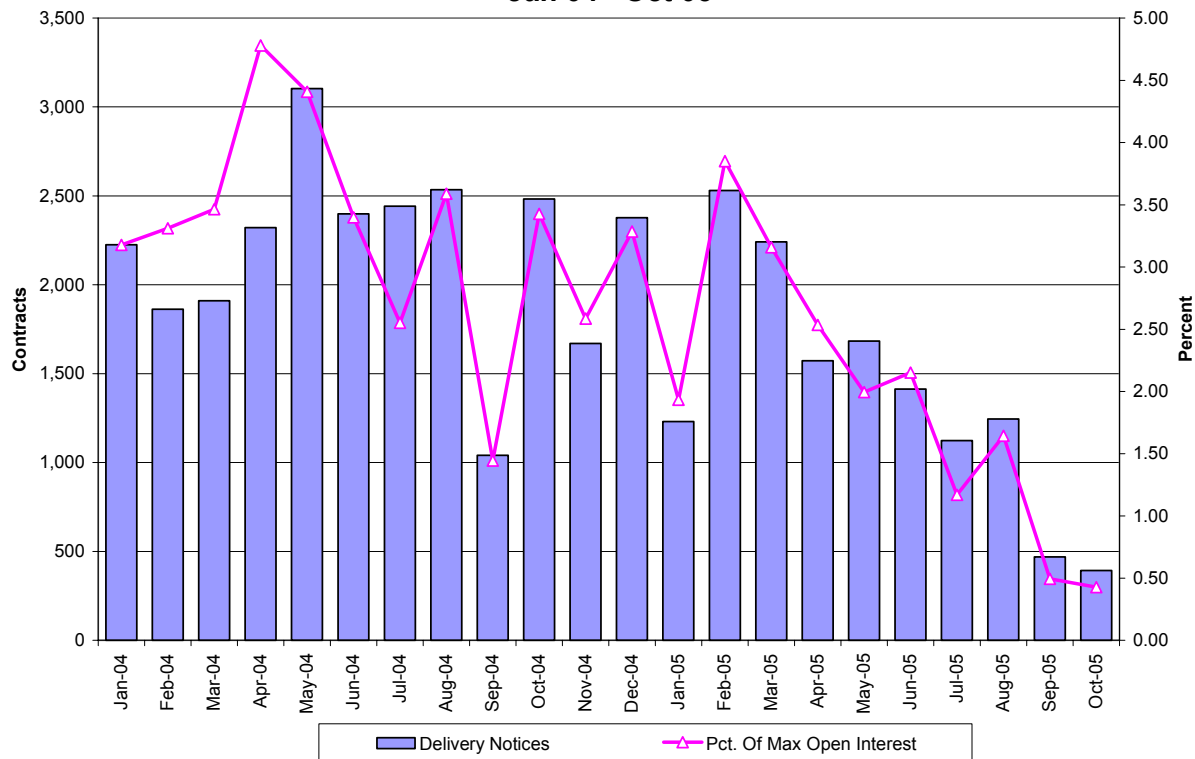
Since futures contracts are primarily risk management contracts, positions are almost always settled by offset. Across all futures markets, less than one percent of open futures positions are settled by delivery. In physically settled futures contracts, such as heating oil and natural gas futures, close scrutiny of the delivery process is vitally important for preventing corners or squeezes. This process is watched closely by the CFTC surveillance staff and the exchanges. A trader holding a large long position into the delivery process can expect that his actions will be closely monitored. The CFTC surveillance staff looks at many sources of information in addition to actual deliveries. The actual delivery experience in heating oil and natural gas does not display any unusual patterns consistent with a corner or squeeze during this period. (Note: Each heating oil contract is written on 1,000 barrels (equivalent to 42,000 gallons) of heating oil. Each natural gas contract is written on 10,000 million British Thermal Units (mmBTU) of natural gas.)



**Figure 3. Delivery Notices - NYMEX No. 2 Heating Oil Futures  
Jan 04 - Oct 05**



**Figure 4. Delivery Notices - NYMEX Natural Gas Futures  
Jan 04 - Oct 05**



#### 4. *The Relationship between Crude Oil Futures Prices and Heating Oil Futures Prices*

A common trading strategy is to simultaneously establish offsetting positions between crude oil futures contracts and futures contracts for the products refined from crude oil, such as heating oil traders commonly call this trading strategy the “crack spread,” referring to the cracking process of turning crude oil into refined products. The chart below displays the heating oil crack spread, using nearest-to-delivery futures contracts, over the past year. This chart shows that the value of the crack spread increased significantly following Hurricanes Katrina and Rita. In other words, prices for heating oil have moved much higher, on a percentage basis, than prices for crude oil. A conclusion that can be drawn from the behavior of the heating oil crack spread is that the increase in heating oil prices immediately following Hurricanes Katrina and Rita were

driven primarily by disruptions to the refining process, and not as much from increases in the level of crude oil prices. In recent weeks, the heating oil crack spread has fallen, but still remains higher than the normally prevailing level.



**Heating Oil Crack Spread.**

## **E. Conclusion**

In U.S energy markets, recent experience has shown that even small disruptions in production, refining capacity, or transportation networks can significantly affect prices in the face of high demand for energy products. Therefore, given the scale of disruptions caused by Hurricanes Katrina and Rita, it is not surprising that current prices for heating oil and natural gas, as well as other energy products have risen significantly. It is precisely during times when the overall market environment is volatile that the risk-management and price-discovery features of futures markets are needed most by commercial users of energy products. All the evidence that we have seen is consistent with the notion that futures markets for heating oil and natural gas and other energy products have been properly performing their risk management and price discovery

roles. The staff of the Commission will continue to conduct very close surveillance of these markets to ensure that they continue to function properly. Finally, improper conduct will not be tolerated, and the CFTC will continue to pursue aggressive enforcement actions against those who break the rules.

This concludes my remarks. I look forward to your questions.